swollen on its anterior surface and bulging above into the fourth ventricle. Both crura cerebi were likewise enlarged by the extension of the growth, and the nerves in relation with the pons distorted and compressed. The third nerves of both sides were flattened and displaced, and the sixth nerves wound round the bulging posterior border of the tumor, especially that on the right side. The tumor proved to be a typical glioma. A. F.

SURGICAL.

A PAPER SPINAL JACKET.

J. Marshall Hawkes, M.D., in the "Medical News," January 16, 1892, describes this invention and its application to a case of spinal injury. A plaster cast is first made from a mould, to be used as a model on which to construct the jacket. Upon this, paper cut into strips is placed in successive layers by means of shellac until a jacket is constructed. To allow of expansion and contraction during respiration, it is divided into two parts on the axillary lines and laced with an elastic cord. This appliance, Dr. Hawkes claims, is the thinnest, lightest, and strongest as yet devised, being on an average less than $\frac{3}{30}$ seconds of an inch thick, weighing only twelve ounces and yet able to sustain a weight of over two hundred pounds. It is also said to be impervious to moisture, and practically indestructible. A. F.

THERAPEUTICAL.

RECTAL ALIMENTATION.

In the "Southern California Practitioner," Feb., 1892, O. D. Fitz Gerald, M. D., recommends the following preparation for nutrient enemata: Take twelve ounces of fresh juicy meat, clear of fat, and of pancreas (fresh also) four ounces. Bruise the pancreas in a mortar with a little tepid water, or liquid beef peptonoids, which is better—keeping the pancreas at about 100° F. Press the pulp on a cheese cloth, to get rid of fat and strings, and keep at 100° F. for two hours, when digestion will be complete. If necessary, it may be thinned by adding liquid beef peptonoids. By placing on ice it can be kept several hours. According to Dr. Fitz Gerald, the quantity of meat required when the patient has to be maintained solely by rectal feeding, is at least twelve ounces a day. The enemata should be given every eight hours; and it has been found that the most convenient times for administration are about seven o'clock in the morning, three in the afternoon, and eleven at night. A. F.

METABOLIC ELECTRIC POLARITY AND ELECTRO-THERAPEUTICS.

(Medical and Surgical Reporter, Nov. 14, 1891.) The main contention of a paper by W. J. Morton, M. D., is deductively that as morbid and normal processes in living tissues, proceed by chemical exchanges (plus an unknown directive tendency) from assimilation of food through excretion, viz: by metabolism, differentiated into anabolism and kalabolism; and as it is probable that chemical exchanges like this cannot occur without exhibition of electric polarity and electric currents; and since experimentally this electric polarity is demonstrable; and since, as the author claims, this polarity must, if due to chemical exchanges of metabolism, be electro-positive in its internal circuit, because katabolic and therefore initiated by the avidity of the oxygen atom (or its congeners) for the atoms of the tissue, subject to combustion, and since, if, as also claimed, this polarity be admitted to be due to chemical changes, it must equally be admitted to represent not only a transformation into electric energy, but also into heat, and all kinetic energies of the living organism. Consequently this initial, invariable, electro-positive polarity may be considered an invariable guide to the electro-therapeutist. Disease, and also normal processes, focal postivity (corresponding to zinc element of a voltaic cell), may be ascertained to be an invariable element of its progress, and hence combated by an inverse current, or applied extraneous medical polarity, which may augment, annul, or reverse the initial focal postivity, and therefore augment, annul or reverse the chemical exchanges underlying it. To employ this guide in practice, normal and morbid metabolism, but first confining attention to the morbid, it may be said to consist of: (*a*) Over-active chemical exchanges, and (*b*) Under-active chemical exchanges. In over-activity: (*a*) An applied (medical) positive pole will increase the activity, *i. e.*, augment the disease. (*b*) An applied negative pole will decrease activity, *i. e.*, lessen disease. In under-activity: (*a*) An applied positive pole will increase the activity. (*b*) An applied negative pole will